

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

TITLE V PROPOSED PERMIT NO. V-00-022
WESTLAKE MONOMERS CORPORATION
WESTLAKE CA&O CORPORATION
CALVERT, CITY, KENTUCKY
JUNE 28, 2000
KUMAR POLE, P.E.
PLANT ID # 21-157-00039
APPLICATION LOG # F903

PUBLIC AND U.S. EPA REVIEW:

On May 17, 2000, the public notice on availability of the draft/proposed permit and supporting material for comments by persons affected by the plant was published in the *Lake News* in Calvert City, Kentucky. The public comment period expired 30 days from the date of publication. During this time no comments were received from the general public.

Comments were received from Westlake on June 12, 2000. Attachment A to this document lists the comments received and the division's response to each comment. Minor changes were made to the permit as a result of the comments received, however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. Please see Attachment A for a detailed explanation of the changes made to the permit.

Additionally, Westlake submitted an application for a minor permit revision on June 12, 2000. The changes requested to the permit affect the Membrane Cell plant for which the facility was previously permitted. Several design changes have been proposed at the Membrane Cell plant; none of these changes involve any significant emission increases beyond currently permitted levels. Furthermore, the changes requested do not result in any new applicable requirements nor do they involve any changes to existing requirements in the permit. Therefore, the changes were incorporated as a minor permit revision in proposed permit that do not require a second public notice. The changes made to the permit as a result of the minor permit revision application have been documented in Attachment B.

Since comments were received from the facility during the public comment period, the permit now being issued is a proposed permit. U.S. EPA has 45 days from the date of the issuance of the proposed permit to comment on it. If no comments are received from U.S. EPA during this period, the proposed permit shall become the final permit.

ATTACHMENT A

Response to Comments

The following comments were received from Westlake on June 12, 2000. The Division response is documented below each comment:

1. SECTION B – EMISSION POINTS, EMISSION TESTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

CHLOR-ALKALI PLANT:

#4 Boiler (E.P. 011), Emission Limitations – Compliance Demonstration Method

Mass Emission Limits - Page 4 & 5, a-c. For particulate matter and SO₂, section “a” states that “burning only the fuels specified in this permit shall be deemed to be in compliance with the applicable performance standards (lb/mmBTU limits).” Additionally, under “opacity limits,” it’s stated that, “for each boiler, no compliance demonstration is necessary while Hydrogen, Process Fuel Gas, Natural Gas and Propane are the only fuels burned.” Subsequently, Westlake has researched and found no applicable ASTM method for measuring the ash content in gaseous fuels. These fuels are clean burning and typically will not create particulates when burned. Westlake believes that, by complying with these requirements, the compliance demonstration method is adequately met and requests that the stack test for particulates under section “c” be removed.

In the event that the Division rejects the request for removal of the particulate stack test requirement, Westlake requests that the Division include the requirement for a single stack test to demonstrate compliance for the facilities’ three boilers (#1, #3 & #4, EP#s 008, 010 & 011). Since the three boilers’ fuels are similar in makeup and they have similar capacities (mmBTU/hr), one test should be representative of all three boilers and will sufficiently demonstrate compliance for all three boilers.

Division Response - The division has reviewed the testing requirements for Boilers #1, #3 and #4 in light of the fact that they burn solely gaseous fuels with minimal ash content. Using AP-42 factors for natural gas, the maximum potential emission rate for each boiler was compared with the maximum allowable emission limit. Since the potential emission rate is significantly lower than the allowable emission limit, the division has determined that the potential for any boiler to exceed the allowable emission rate is minimal and does not merit a stack test. Taking this into account, the testing requirements for particulate matter have been deleted from the permit for all three boilers.

2. ENERGY AND ENVIRONMENTAL PLANT:

#1 and #3 Boilers (E.P.s 008 & 010), Emission Limitations – Compliance Demonstration Method

See above comment for the #4 Boiler

Division Response - See response to comment 1. above.

3. **SECTION B – EMISSION POINTS, EMISSION TESTS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONT.)**

ETHYLENE PLANT:

Ethylene Flare (E.P. 321)

Description – Page 20. The flare BTU/hr rating is incorrect. It should be changed to 5,750 mmBTU/hr. This number is based on a maximum smokeless feedrate of 250,000 lb/hr x 23,000 BTU/lb.

Division Response - The division concurs with this comment. The requested change has been made to the permit since it does not relax any applicable emission standard or any monitoring, recordkeeping or reporting requirement.

(Comment 3. continued)

Description – Page 20. Some of the equipment listed in the description does not routinely vent to the Ethylene flare. Normally, they vent to #8 & #9 furnaces (E.P.s #327 & 328) and are listed on page 24 under the “Ethylene Wastewater Pre-treatment Plant (ET-1).” In addition, other pieces of equipment should be added to the list. Westlake requests that the list be changed to the following:

TK 191 – Process Sewer Accumulation Tank	TK 940 – Process Tank
TK 198A – Neutralization Tank	TK 160 – Process Tank
TK 198B – Neutralization Tank	TK 211 – Water Collection
Process Vents from APT, LLC Plant	
Process Vents from Tank Truck, Tank Car &	
Barge Unloading and Loading Operations	

Division Response - The division concurs with this comment. The requested change has been made to the permit since it does not relax any applicable emission standard or any monitoring, recordkeeping or reporting requirement.

4. **MONOMERS PLANT:**

Oxy Incinerator (E.P. #453) and Primary Incinerator (E.P. #530)

Description – Page 58. Due to the *Monomers Process Improvement Plan* addition to the Monomers plant, the following sources venting to the Oxy and/or Primary Incinerator should be added to the equipment list.

Heads Column should be changed to Heads Columns. The new and existing Heads Columns will be available for use under this permit and will vent to the Oxy and/or Primary Incinerators.

Division Response - The division concurs with this comment. The requested change has been made to the permit since it does not relax any applicable emission standard or any monitoring, recordkeeping or reporting requirement.

5. Miscellaneous Errors

The draft permit contains the following miscellaneous errors:

SECTION C – INSIGNIFICANT ACTIVITIES

WESTLAKE CA&O PLANT:

- i. On page 90, E.P. # 036 – Gasoline Storage Tank, the emission point number should be changed to (037).
- ii. On the bottom of page 90 and the top of page 91, E.P. #847 – Diesel Fuel Tank is listed twice. One item should be removed.
- iii. On page 91, the descriptions of E.P. #s 302, 303 & 325 should be changed to the following:
(302) Barge Unloading/Loading
(303) Tank Car Unloading/Loading
(325) Tank Truck Unloading/Loading

Division Response - The division concurs with each of these comments. The requested changes have been made to the permit since they do not relax any applicable emission standard or any monitoring, recordkeeping or reporting requirement.

ATTACHMENT B

Minor Permit Revision

The following changes were made to the permit as a result of the minor permit revision application received from Westlake on June 12, 2000. For a detailed description of the proposed changes to the Membrane Cell plant, please see the minor permit revision application.

1. The Low Pressure Scrubber proposed in the original Membrane Cell plant application will not be constructed as part of the new design. All references to this emissions unit were removed from the permit.
2. The List of Insignificant Activities (Section C) was amended to remove the items that have been eliminated as part of the re-design of the Membrane Cell plant. Additionally, some new items were added to the list and minor corrections were made to other items on the list.
3. A new emission point - HCl Synthesis Scrubber was added to the permit on Page 7 along with Operating Limitations on the scrubber.
4. With the re-design of the Membrane Cell plant, the proposed new Cooling Tower (EP 881) will not be built. All references to this emissions unit were removed from the permit.
5. The water recirculation rate through an existing Cooling Tower (EP 849) will be increased from 10,000 gpm to 13,000 gpm. A new condition has been added to the permit requiring the permittee to install a mist eliminator on this tower when the water circulation rate exceeds 10,000 gpm.
6. Minor changes were made to General Condition G (d) 1 on Page 107 of the permit including removal of the Low Pressure Scrubber, addition of the HCl Synthesis Scrubber and additional language authorizing construction of the new insignificant activities in Section C associated with the Membrane Cell plant.
7. General Conditions F.5. and F.7. in Section F of the permit were updated to reflect the latest version of these standard conditions. The new language clarifies the treatment of emission units under construction in the 6-monthly summary reports and the annual compliance certifications to be submitted by the permittee.